

WHAT IS CLAIMED IS:

1. A hybrid type telephony system capable of establishing a connection between conventional type telephone sets contained in an exchange unit and LAN type telephone sets contained in an IP network, the system comprising:

a gateway circuit connected between the exchange unit and the IP network and performing voice data format conversion, and

a central control unit connected to the LAN of the IP network for establishing a communication path to the exchange unit via a control bus, controlling switching of IP packets of the IP network, managing IP address information of the LAN type telephone sets and the gateway circuit via the LAN, and controlling connection between the LAN type telephone sets and connection between the LAN type telephone sets and the gateway circuit.

2. A hybrid type telephony system capable of establishing a connection between conventional type telephone sets contained in a private branch exchange unit and LAN type telephone sets contained in an IP network, the system comprising:

a gateway circuit connected between the private branch exchange unit and the IP switch and performing voice data format conversion, and

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a central control unit connected to the LAN of the
10 IP switch for establishing a communication path to the
private branch exchange unit via a control bus,
controlling switching of IP packets of the IP network,
managing IP address information of the LAN type telephone
sets and the gateway circuit via the LAN, and controlling
15 connection between the LAN type telephone sets and
connection between the LAN type telephone sets and the
gateway circuit.

3. The hybrid telephony system as claimed in Claim
1, wherein the LAN type telephone sets have IP address
information of the central control unit, upon call to one
of the LAN type telephone sets, transmits a call
5 requesting packet to the central control unit via the LAN
according to the IP address information, inquires the
central control unit about a destination IP address, and
fetches the destination IP address to establish
communication.

4. The hybrid telephony system as claimed in Claim
2, wherein the LAN type telephone sets have IP address
information of the central control unit, upon call to one
of the LAN type telephone sets, transmits a call
5 requesting packet to the central control unit via the LAN
according to the IP address information, inquires the
central control unit about a destination IP address, and
fetches the destination IP address to establish
communication.

5. The hybrid telephony system as claimed in Claim
3, wherein upon connection between one of the LAN type
telephone sets and one of the conventional type telephone
sets, the central control unit reports the IP address of
5 the gateway circuit to the LAN type telephone set and the
IP address of the LAN type telephone to the gateway
circuit, so as to establish a communication path between
the conventional telephone set and the gateway circuit.

6. The hybrid telephony system as claimed in Claim
4, wherein upon connection between one of the LAN type
telephone sets and one of the conventional type telephone
sets, the central control unit reports the IP address of
5 the gateway circuit to the LAN type telephone set and the
IP address of the LAN type telephone to the gateway
circuit, so as to establish a communication path between
the conventional telephone set and the gateway circuit.

7. The hybrid telephony system as claimed in Claim
1, wherein the central control unit assigns a single
extension representation telephone number for the
plurality of conventional type telephone sets and the
5 plurality of LAN type telephone sets as a single group
and, upon call from one of the conventional telephone
sets or the LAN type telephone sets using the extension
representation telephone number, performs a call-incoming
processing to all the telephone sets in the group.

8. The hybrid telephony system as claimed in Claim
2, wherein the central control unit assigns a single

extension representation telephone number for the plurality of conventional type telephone sets and the 5 plurality of LAN type telephone sets as a single group and, upon call from one of the conventional telephone sets or the LAN type telephone sets using the extension representation telephone number, performs a call-incoming processing to all the telephone sets in the group.

9. The hybrid telephony system as claimed in Claim 3, wherein the central control unit assigns a single extension representation telephone number for the plurality of conventional type telephone sets and the 5 plurality of LAN type telephone sets as a single group and, upon call from one of the conventional telephone sets or the LAN type telephone sets using the extension representation telephone number, performs a call-incoming processing to all the telephone sets in the group.

10. The hybrid telephony system as claimed in Claim 4, wherein the central control unit assigns a single extension representation telephone number for the plurality of conventional type telephone sets and the 5 plurality of LAN type telephone sets as a single group and, upon call from one of the conventional telephone sets or the LAN type telephone sets using the extension representation telephone number, performs a call-incoming processing to all the telephone sets in the group.

11. The hybrid telephony system as claimed in Claim 5, wherein the central control unit assigns a single

extension representation telephone number for the plurality of conventional type telephone sets and the 5 plurality of LAN type telephone sets as a single group and, upon call from one of the conventional telephone sets or the LAN type telephone sets using the extension representation telephone number, performs a call-incoming processing to all the telephone sets in the group.

12. The hybrid telephony system as claimed in Claim 6, wherein the central control unit assigns a single extension representation telephone number for the plurality of conventional type telephone sets and the 5 plurality of LAN type telephone sets as a single group and, upon call from one of the conventional telephone sets or the LAN type telephone sets using the extension representation telephone number, performs a call-incoming processing to all the telephone sets in the group.

13. The hybrid telephony system as claimed in Claim 1, wherein the central control unit integrates the call control, service control, maintenance/operation service.